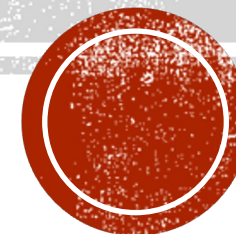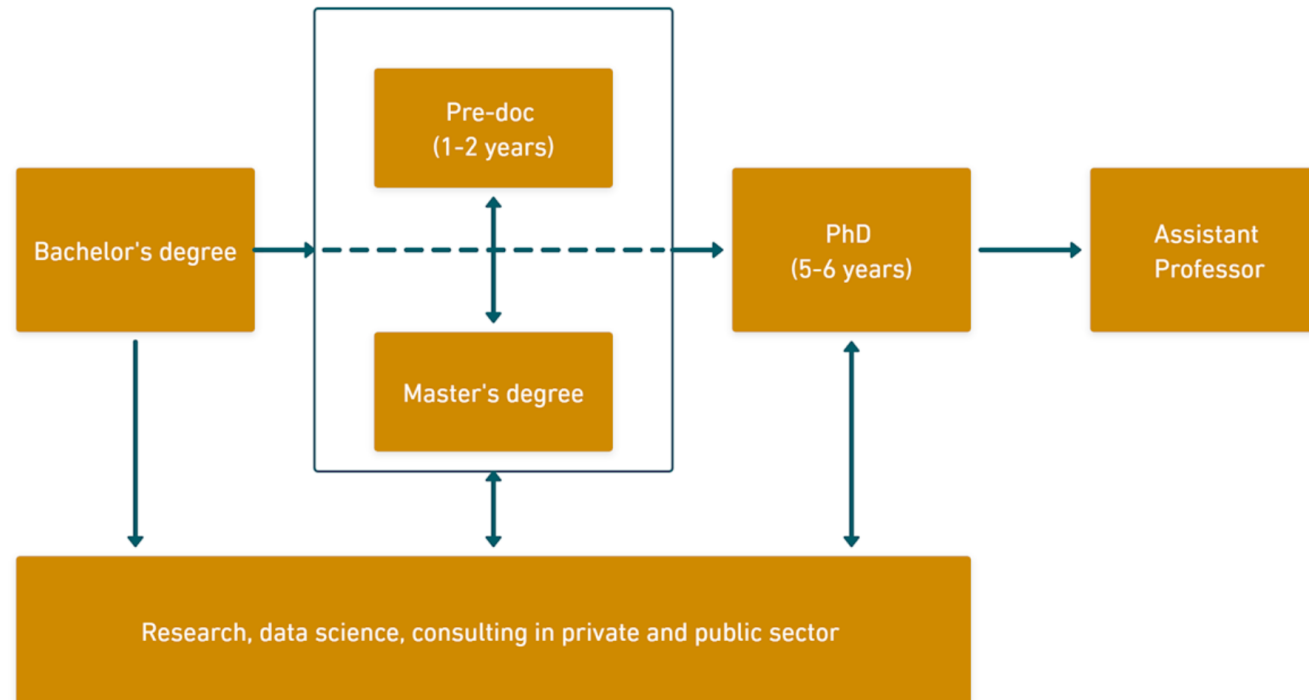# PRE-DOC EXPERIENCES WEBINAR

September 3, 2023

WHAT IS A PRE-DOC?

▪ Pre-doc: **P**athways to **Re**search and **Do**ctoral **C**areers

▪ Research Assistant (RA) for 1-2 years between undergard and Ph.D. (U.S. norm)

Source: predoc.org

1

WHAT IS A PRE-DOC?

- Twofold purpose:
    1. Teach useful set of skills to future Ph.D. students that helps doing research more efficiently.
    2. Extra resource for professors publishing labor- and time-intensive projects!

- As a Pre-doc, you do both "fun" (30%) and "dull" (70%) tasks of research projects:
    - Gather and clean data
    - Conduct surveys
    - Run statistical analyses
    - Write models
    - Field work (limited to dev econ positions)
    - Write reports
    - Proofreading papers
    - Literature review
    - Create slides

WHY DO A PRE-DOC?

- Doing a Pre-doc is becoming more prevalent.

- Until ~10yrs ago doing a Pre-doc was <u>sufficient</u> to get into descent Ph.D. programs. Nowadays it seems to have become a <u>necessity</u>.

TABLE 5
Pre-PhD Work Experience

	Number of Students	% of Group		Number of Students	% of Group
No pre-PhD work	116	51.3	≤1 year work	163	72.1
(of which, American)	29	36.3		40	50.0
(of which, non-American)	87	59.6		123	84.3
(of which, male)	96	53.3		133	73.9
(of which, female)	20	43.5		30	65.2

Source: Bryan (2019)

3

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Pre-docs are still the minority, but lots of people do a masters before their PhD: There has been a lot of recent talk about an increasing tendency for people to do a "pre-doc" before their PhD, where this is a year or more of research experience as a full-time RA, researcher at the Federal Reserve, consultant at an international organization, or working for an organization like IPA or JPAL. Only 37% of the top school sample, and 23% of the World Bank interview sample had done a pre-doc. However, 74% of the World Bank sample had done a separate Master's degree before enrolling in their PhD. Doing a Master's is particularly common for non-U.S. students, but doesn't seem that much different from when I was applying for PhDs almost 25 years ago.

Source: World Bank Blog (2021)

3

WHY DO A PRE-DOC?

- In Iran, small (if any) exposure to top-notch seminars and field courses:
  - Thus, unable to follow current research trends,
  - Thus, knowledge gap between us and rest of the world,
  - Thus, can't build a "strong enough" resume,
  - Thus, harder to get into good Ph.D. programs.

- One way to break out is doing a Pre-doc.

PROS AND CONS OF DOING A PRE-DOC

- Pros:
  - Paid position!
  - Exposure to high-level research.
  - Extend your network, attend high-quality seminars, take high-quality classes.
  - Learn useful skills (e.g., good coding practices, collaboration w/ others, task management).
  - Helps decide whether to pursue a Ph.D. and increase chances of getting into good programs.

- Cons:
  - Involves lots of dull work (e.g., data cleaning, writing reports, creating slides, proof reading).
  - <u>Most likely</u> won't get credit for your contributions!
  - Not much time to do your own research vs. a Master's program.
  - Lengthy duration of positions / lengthening path to completion of Ph.D.

WHERE TO FIND PRE-DOC POSITIONS?

- Positions become available throughout the year.

- Mostly concentrated around <u>early October</u> and <u>early March</u>.

- Beware that <u>not all positions offer visa sponsorship</u>!

- To find positions, keep an eye on:
  - https://predoc.org
  - NBER RA listing (https://www.nber.org/career-resources/research-assistant-positions-not-nber)
  - Opportunity Insights, Stanford SIEPR, BFI, World Bank, ECB, or similar institutions
  - Social Media: LinkedIn, Twitter (@econ_ra), Telegram groups(!), etc.

PRE-DOC REQUIREMENTS

- Must haves:
  - CV
  - Cover Letter
  - One (or two) recommendation letters
  - Proficiency in <u>at least one</u> programming language/software (Stata, R, Python, Julia)
  - Communication skills
  - TOEFL/IELTS (varies by case, <u>most likely needed only after getting an offer</u>)
  - Research interest (broadly) matching future PI's interests

- Recommended:
  - Proficiency in <u>at least two</u> programming languages: preferably Stata + R or Python (econ/finance ppl care –probably too much– for Stata)
  - Writing sample
  - Prior RA experience(!)
  - Excellent grades

HOW TO APPLY FOR PRE-DOC POSITIONS?

- Common procedure (different cases may slightly vary):
  1. Submit required materials
  2. Successfully complete a coding task
     - Moderate to hard, with a tight deadline
     - Usually choice of programming language up to you
  3. Do a post-task interview. Be ready to discuss:
     - The coding task: method, compromises, results, etc.
     - <u>Everything</u> listed on your CV + Cover Letter. (more focus on RA-related parts)
     - Why you want the job!
     - Sometimes may get asked "weird" questions:
       - How many cars are there in Tehran?
       - How are Merge Sort and Quicksort different? (if mentioned taken an "Algorithms" course)

REFERENCES

- Bryan, Kevin, 2019, "Young "Stars" in Economics: What They Do and Where They Go", *Economic Inquiry*, 57(3):1392-1407.

- McKenzie, David, 2021, "What is the profile of leading development economists on the PhD job market?", *World Bank Blog*, https://blogs.worldbank.org/impactevaluations/what-profile-leading-development-economists-phd-job-market